AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An inkjet printing system comprising:

at least one ink printhead for depositing drops of a colored ink on a medium;

a fixer printhead for depositing drops of a fixer onto the deposited drops of the colored ink; and

an overcoat printhead for depositing drops of an overcoat onto the deposited drops of the colored ink such that three different materials are deposited on the medium.

2. (Original) The system of claim 1, further comprising a processor for sending swath data to the ink, fixer and overcoat printheads during printing.

3. (Original) The system of claim 2, wherein the processor generated swath data for the fixer and overcoat printheads from the swath data for the ink.

4. (Original) The system of claim 3, wherein the processor also generates the swath data for each printhead.

5. (Original) The system of claim 2, wherein the active ink ejection elements of each printhead are logically divided into M contiguous groups, where integer $M>1$;
and wherein at least one group of each printhead is unused for printing.

6. (Original) The system of claim 5, wherein the groups contain the same number of ink ejection elements.

7. (Original) The system of claim 6, wherein $M=4$; wherein the third and fourth groups of ink printhead ink ejection elements are always unused; and wherein the first and second groups of fixer and overcoat printheads are always unused.

8. (Original) The system of claim 7, wherein at most the first and second groups of color printhead ink ejection elements are active during printing; and wherein at most the third and fourth groups of fixer and overcoat ink ejection elements are active during printing.

9. (Original) The system of claim 1, further comprising at least one additional fixer or overcoat printhead for bi-directional printing.

10. (Original) The system of claim 1, wherein the drops of the fixer and the drops of the overcoat combine on the medium to form a protective coating for the drops of the colored ink.

11. (Original) The system of claim 1, further comprising means for delaying the depositing of the drops of the fixer and the drops of the overcoat until the drops of the colored ink have at least partially dried.

12. (Original) The system of claim 1, wherein the at least one ink printhead includes a black printhead, a cyan printhead, a magenta printhead, and a yellow printhead.

13. (Original) The system of claim 1, wherein the at least one ink printhead includes a black printhead, a light cyan printhead, a light magenta printhead, a dark cyan printhead, a dark magenta printhead, and a yellow printhead.

14. (Original) The system of claim 1, further comprising a controller for operating the printheads in a mode in which fixer and overcoat are not deposited.

15. (Currently Amended) An inkjet printing apparatus, comprising:

a carriage assembly moveable in a scanning direction for carrying at least one inkjet printhead, a fixer printhead, and an overcoat printhead; and

a processor programmed to generate swath data to the at least one ink printhead, a fixer printhead and an overcoat printhead <u>such that three different materials are deposited on the medium</u> during printing.

16. (Original) The apparatus of claim 15, wherein the carriage assembly provides in-line arrangement of all printheads such that the colored ink, the fixer, and the overcoat are deposited in substantially the same rows of a print medium as the carriage assembly moves in the scanning direction.

17. (Original) The apparatus of claim 15, wherein the carriage assembly provides a staggered arrangement of the printheads such that the fixer and overcoat are deposited in substantially different rows of a print medium from the colored ink as the carriage assembly moves in the scanning direction.

18. (Original) The apparatus of claim 15, wherein the fixer printhead is located at one end of the in-line arrangement of inkjet printheads, and the overcoat printhead is located at the opposite end of the in-line arrangement.

19. (Original) The apparatus of claim 15, wherein the fixer and overcoat printheads are half-height.

20. (Original) The apparatus of claim 15, wherein the overcoat and fixer printheads are in a separate row from the ink printheads.

21. (Currently Amended) Apparatus comprising a processor programmed to generate swath data for an ink printhead, a fixer printhead, and an overcoat printhead such that the swath data causes ink printhead to deposit drops of a colored ink, the fixer printhead deposits drops of a fixer onto the colored ink, and the overcoat printhead deposits drops of an overcoat onto the colored ink such that three different materials are deposited on the medium.

22. (Original) The apparatus of claim 21, wherein the processor is a printer controller.

23. (Original) The apparatus of claim 21, wherein the processor generates swath data for the fixer and overcoat printheads from swath data for the ink printhead.

24. (Original) The apparatus of claim 21, wherein the processor also generate the swath data for the ink printhead.

25. (Original) The apparatus of claim 21, wherein the processor always generates null swath data for a group of ink ejections elements in each printhead.

26. (Original) The apparatus of claim 21, wherein the processor generates swath data for N contiguous groups of each printhead, where integer N>1; and wherein null swath data is always generated for at least one group of each printhead.

27. (Original) The apparatus of claim 26, wherein the groups contain the same number of ink ejection elements.

28. (Original) The apparatus of claim 26, wherein N=4; wherein null swath data is always generated for the third and fourth groups of ink printhead ejection elements; and wherein null swath data is always generated for the first and second groups of fixer and overcoat printhead ink ejection elements.

29. (Currently Amended) A program for causing a processor to generate swath data for printer including ink, and first and second protective coating printheads, the first and second protective coating printheads containing fluids that, when in contact, form a protective coating, each printhead having a plurality of separate ink ejection elements, the program instructing the processor to generate swath data only for a subset number of ink ejection elements in each printhead so that ink is deposited and the fixer and overcoat are deposited on the ink such that three different materials are deposited on the medium during printing.

30. (Original) The program of claim 27, wherein the program causes the processor to generate swath data for N contiguous groups of each printhead, where integer N>1; and wherein null swath data is always generated for at least one group of each printhead.

31. (Original) The program of claim 27, wherein N-4 and the 4 groups contain the same number of ink ejection elements; wherein null swath data is always generate for the third and fourth groups of ink printhead ink ejection elements; and wherein null swath data is always generated for the first and second groups of printhead ejection elements of the first and second protective coating printheads.

32. (Currently Amended) An article for a processor, the article comprising:

computer memory; and

instructions encoded in the memory to cause the processor to send swath data to ink, fixer and overcoat printheads such that three different materials are deposited on the medium.

33. (Currently Amended) A method of using ink, fixer and overcoat printheads to print on a print medium, the method comprising:

sending swath data to the ink printheads during a first pass, the swath data causing the ink printheads to deposit ink on the medium during the first pass; and

sending swath data to the fixer and overcoat printheads during a second pass, the swath causing the ink printheads to deposit ink on the fixer and the overcoat during the second pass such that three different materials are deposited on the medium.

34. (Original) The method of claim 31, wherein active swath data is sent to only a subset of ink ejection elements in the ink printheads during the first pass, and only a subset of ink ejection elements in the fixer and overcoat printheads during the second pass.

35. (Original) The method of claim 31, wherein the ink ejection elements of each printhead are logically divided in to N contiguous groups, where integer N>2; and wherein null swath data is always sent to at least one group of each printhead during printing.

36. (Original) The method of claim 33, wherein N=4 and the 4 groups contain the same number of ink ejection elements; wherein null swath data is always generated for the third and fourth groups of ink printhead ink ejection elements; and wherein null swath data is always generated for the first and second groups of fixer and overcoat printhead ink ejection elements.

37. (Currently Amended) A method of printing an image with an inkjet printer such that three different materials are deposited on the medium, comprising:

depositing drops of a colored ink onto a medium;

depositing drops of a fixer onto the deposited drops of the colored ink; and depositing drops of an overcoat onto the deposited drops of the colored ink; the overcoat and fixer reacting to form a protective coating for the ink.

38. (Original) The method of claim 37, further comprising:

determining a media type associated with the medium; and

performing the steps of depositing drops of the fixer and depositing drops of the overcoat only if the media type is plain paper.

39 (Original) The method of claim 37, wherein the drops of the fixer are deposited before the drops of the fixer.

40. (Original) The method of claim 37, wherein the drops of the overcoat are deposited onto the deposited drops of the fixer.

41. (Original) The method of claim 37, further comprising:
determining a media type associated with the medium; and
omitting the steps of depositing drops of the fixer and depositing drops of the overcoat only if the media type is specialty media.

42. (Currently Amended) A program storage element for a processor, comprising:
computer memory; and
instructions encoded in the memory to cause the processor to control ink ejection elements to deposit drops of a colored ink on a medium, and deposit drops of a fixer and an overcoat onto the deposited drops of the colored ink such that three different materials are deposited on the medium.